

Section 3-2 Characteristics of Stars

I. Star Organization

A. Galaxy – _____

B. Universe – _____

II. Measuring distances to stars

A. Light year – _____

B. Astronomers use _____

C. Parallax - _____

III. Stars are classified by _____, _____, and _____.

Summarize “Size”: _____

Summarize “Color/Temperature”: _____

Summarize “Brightness”: _____

****BE SURE YOU UNDERSTAND HOW THE HERTZSPRUNG-RUSSELL DIAGRAM IS USED!! (p. 109, Fig. 10)**

Section 3-3 Lives of Stars

I. Studying Live of Stars

A. Astronomers learn about stars by _____

B. How long a star lives depends _____

II. Star Life

A. Born – _____

B. Death – _____

Summarize White Dwarf - _____

Summarize Neutron Star - _____

Summarize Black Hole - _____

Section 3-4 Star Systems and Galaxies

I. Galaxies

A. We live in the _____

B. Made up of other _____, _____, & _____

C. Three Galaxy Types

1. Spiral – _____

2. Elliptical – _____

3. Irregular – _____

Section 3-5 History of the Universe

I. Big Bang Theory

A. Was a huge _____

B. Occurred approximately _____ years ago

C. Other galaxies moving _____ from each other

II. Solar system formation

A. Started forming approx. _____ billion years ago

B. Explain how the solar system formed (Step-by-step from Figure 20)

1. _____

2. _____

3. _____

4. _____

Review Questions (ALL to be answered in complete sentences):

Sec. 3-2

1. What is Parallax? How is it useful in Astronomy?

2. List the three characteristics used to classify stars.

3. Using the H-R diagram on p.109, summarize the characteristics of the following stars:

Sun_____

Betelgeuse_____

Rigel_____

Sec. 3-3

1. Why do small stars have a longer life than big stars?_____

2. What is the difference between stars that become a white dwarf vs. a neutron star? _____

3. How do astronomers detect the location of a black hole? _____
